GYNECOLOGY

UNDER THE CHARGE OF

JOHN G. CLARK, M.D.,

PROFESSOR OF GYNECOLOGY IN THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA.

Diagnosis and Treatment of Vulvovaginitis in Children.—Some very interesting suggestions upon these subjects are made in a recent article by C. C. Norris (*Jour. Amer. Med. Assn.*, 1915, lxv, 327). Norris calls attention to the difficulty in demonstrating gonococci in smears obtained in the ordinary manner, from chronic cases, even though the patient may still harbor active organisms. The ability to make such demonstrations is of the greatest importance, however, in determining the point at which the case may be considered cured and treatment stopped, for other theoretical means of determining this, such as the complement-fixation test, have proved entirely unreliable in gonorrheal vaginitis of children. Norris has found the following technique exceedingly valuable for this purpose: The child is placed in an elevated position, so that fluid will not run out of the vagina, and with a soft rubber eye-syringe about a half-ounce of 1 to 5000 bichloride solution, made up in normal salt, is injected. It is important to have the patient in such a position that the vagina will be ballooned out by the atmospheric air. With the vagina thus partly filled with solution and thoroughly distended, a smooth glass rod is introduced and the various parts of the vagina are rubbed with it for the purpose of detaching any adherent secretion. In a further effort to obtain material the solution may be forced in and out a number of times with the syringe. The solution thus obtained is centrifuged for twenty minutes at high speed, and the sediment examined in the usual way. Where this procedure is negative in suspected cases, the following addition is advocated by the author: On the day preceding the bacteriologic examination the entire vagina is painted with a fairly strong silver nitrate solution—5 to 10 per cent., according to the age of the patient—in order to produce a distinct reaction. On the following day washings are obtained in the manner described above, and will often show gonococci when they previously were negative. In 21 chronic cases, Norris says that he obtained positive results in 45 per cent. with ordinary smears, in 75 per cent. with simple washings, and in 97 per cent. with washings preceded by chemical irritation. He does not think it is safe to consider that a cure has been affected until negative findings have been obtained at three consecutive bacteriologic examinations at two-week intervals, no treatment having been employed in the meantime, and the last examination having been preceded by irritation with silver nitrate. With regard to treatment, the author lays great stress on the necessity for perseverance, even in face of the apparent disappearance of symptoms. In the treatment which he has adopted, he depends largely on the well-known fact that dessication quickly destroys the gonococcus. With the patient in the knee-chest or Sims' position, or in the case of an infant, with the buttocks elevated by the nurse, the

vagina is ballooned out until it is well distended. In the majority of instances, the hymen should be sacrificed, in order to give more thorough drainage and greater accessibility for treatment. The vagina is thoroughly washed with a weak permanganate solution, and is then swabbed with a 25 per cent. argyrol solution, the latter being employed chiefly as a cleansing agent. After the argyrol has been applied, the vagina is dried thoroughly with a thin strip of gauze, an empty atomizer being used to complete the drying. The child is now left in the Sims position for twenty to thirty minutes, care being observed to keep the vagina well distended with air during this time. As a final step, it is flooded with a weak solution of silver nitrate, starting with 1 or 2 per cent., this gradually being increased as the vaginal mucosa becomes more resistant. These treatments are given three times a week, the vagina being washed out daily by the mother or nurse with a weak permanganate or argyrol solution by means of a soft rubber eye-syringe. Norris admits that this treatment is hardly adapted to dispensary work, owing to the amount of time required. He says that in 14 cases treated in this manner, a cure, as determined by the criteria described above was obtained in an average of twelve weeks, dating the cure from the first of the three negative examinations. The most persistent case lasted eighteen weeks, recurrence having taken place after two negative examinations, gonococci being found in the final test preceded by silver nitrate irritation. In conclusion, the author insists upon the necessity for observing thoroughness and regularity in carrying out the treatment. He believes that the simple instillation into the vagina, often at irregular intervals, of various solutions, as is frequently practised, is of little value in the treatment of the disease.

Pelvic Varicocele.—This subject, which was discussed in this department a year or so ago, has been again brought before the profession in a recent paper by PINKHAM (*Amer. Jour. Obst.*, 1915, lxii, 244). He calls attention to the fact that the chief symptom complained of by many women seeking advice for so-called female troubles is a persistent, dull aching pain in the left iliac region, in some instances relieved by the recumbent position, aggravated by standing or walking, and usually worse at the menstrual periods. Often no definite pelvic lesion is palpable. Many of these women are told they have "chronic oöphoritis" or that they have nothing at all the matter; as Pinkham points out, however, the fact is too frequently overlooked that there is always a good reason for physical suffering. Pinkham believes that the true cause of the trouble in many cases of this sort is a varicose condition of the veins of the broad ligament, producing a lesion analogous to varicocele in the male. It occurs much more frequently on the left side than the right, probably because of the fact that on the former side the ovarian vein runs upward and inward to the renal vein, which it enters at right angles; it is very poorly supplied with valves, and anything which would interfere with the free flow of blood would produce venous engorgement. The vein on the right side, on the other hand, has a shorter course, entering the inferior vena cava directly at an acute angle. Pinkham thinks that women who have borne children are more apt to develop a varicose condition of the broad ligament veins than are nullipara, though it may occur in the latter

also. Subinvolution of the uterus, loss of support due to lacerations of the birth canal, and retroversion of the uterus all tend to favor venous stasis in the parturient woman, while an adherent sigmoid, with associated constipation, may be the underlying factor in a nullipara. The author strongly believes that if more attention were paid to the possible existence of pelvic varicosities, the results of surgical intervention in cases of indefinite pelvic pain would be vastly improved. The diagnosis, he admits, must often be made by elimination. The treatment he advises is double ligation of the varicosities, with excision of the intervening area. He reports a number of cases in which this procedure has been carried out, apparently with exceedingly favorable end-results.

Repair of the Ureter with Small Intestine.—An interesting case is reported by BARBAT (*Calif. State Jour. Med.*, 1915, xiii, 70), in which an extensive ureteral injury was repaired by means of a segment of intestine, and a kidney thus saved that would otherwise have had to be sacrificed. The patient was a woman, aged thirty years, who a few months before coming under Barbat's observation had undergone an operation for extensive pelvic inflammatory disease, with widespread adhesions and much distortion of the normal relations. The operator had inadvertently included the right ureter in one of his sutures. A collection of urine formed in the region of McBurney's point, and was evacuated by a superficial incision, following which a urinary fistula formed at this point, and continued to discharge. At a subsequent operation about 1½ inches of the ureter were found to be lacking; an unsuccessful attempt was made to form a new ureter by sewing adjacent tissues around a ureteral catheter introduced from the bladder, but this produced no improvement in the condition. When first seen by Barbat, the patient presented a small fistula in the region of McBurney's point, through which clear, bacteria-free urine was constantly discharged. Indigo-carmine appeared here at about the same time as from the left ureteral orifice in the bladder; it seemed probable, therefore, that the right kidney was functionally unimpaired, and worth preserving, if possible. At operation, numerous intestinal adhesions were separated, after which the ureter could be traced down to a mass corresponding to the bottom of the fistula. It was ligated and cut close to this, the proximal end being lifted up and temporarily clamped. A loop of ilium about 7 inches long was then isolated, continuity of the intestinal tract being reëstablished by means of a Murphy button. Great care was taken to see that the blood supply of the isolated segment was not interfered with, and that undue traction was not made on its mesentery. It was flushed out with a large amount of 1 to 1000 formalin solution, and the upper end closed by inversion. The lower end was sewed to a slit in the bladder by continuous through-and-through sutures. A small oblique puncture was then made in the side of the intestine near the closed upper end, and the ureter anastomosed into this by the same technique as is commonly employed in ureterovesical implantation. The patient had a rather stormy convalescence, and for a time urine was discharged from the old fistula, as well as from a new one which formed in the abdominal scar. These fistulæ eventually closed, but not until three and seven months re-

spectively, after operation. The patient has since gained 25 pounds in weight, and is in excellent health three years later, although at the last examination the bladder urine showed the presence of some colon bacilli and shreds of mucus.

OTOLOGY

UNDER THE CHARGE OF

CLARENCE J. BLAKE, M.D.,

EMERITUS PROFESSOR OF OTOLOGY IN THE HARVARD MEDICAL SCHOOL, BOSTON.

Experimental Investigation Concerning the Influence of Ethyl and Methyl Alcohol upon the Organ of Hearing. A Contribution to the Pathogenesis of Neuritis Acustica Alcoholica.—The deleterious effect of many drugs upon the organ of hearing is well known and the results of the ingestion of quinin and salicylic acid and of various arsenical combinations, in this respect, have been frequently demonstrated. Of the effects of such other substances as chenopodium oil, lead, silver and mercurial salts, phosphorous and carbonic acid but little is definitely known and our knowledge of the effect of alcohol upon the ear is equally imperfect, begin confined, according to the author, mainly to the results of occasional and imperfect clinical observations and of two lines of experimental pathological investigation. The protracted consumption of alcohol may result eventually, as has been demonstrated, in inflammation and degeneration of the auditory nerve, but notwithstanding the extent of alcoholism, alcoholic polyneuritis is of comparatively rare occurrence and especially so as exhibited in the auditory nerve. Marian and Ostmann have shown that alcohol has a lesser affinity for the auditory nerve than the drugs previously mentioned and that the deleterious influence of alcohol is much more frequently exhibited in other than the auditory nerve, especially the optic nerve. Zytowitsch gives as the results of his investigations in alcohol poisoning in rats and guinea-pigs changes exhibiting themselves first in the ganglion spirale, next in the efferent nerves in the lamina spiralis ossea and, finally, in the organ of Corti, the basal whorl being the last and the least affected. Hemorrhages were notable in all cases, less frequently in the endolymphatic portion; the vestibular region was also included in the area of these ecchymoses. Tadokoro found as the result of his investigations in the majority of his cases an osteoplastic labyrinthitis and the author refers the hemorrhages in the first instance to postmortem changes and the labyrinthine showings in the second instance to suppurative infection from the middle ear. The clinical studies of Marian and the supplementary clinical contributions of Zytowitsch refer the aural changes incident to alcoholism, both chronic and acute, to the labyrinth, and as exhibited, preponderatingly, in men between twenty-five and fifty years of age. In no instance was there opportunity for postmortem evidence of the clinically